

CLAIMS

What is claimed is:

- 1 1. A system comprising:
2 a plurality of electronic devices, wherein selected ones of the electronic
3 devices include a physical-tag and a logical-tag, wherein the physical-tag includes a
4 physical-tag identifier, and wherein the logical-tag includes logical attribute
5 information;
6 at least one physical-tag reading device, which is operable to read the
7 physical-tag identifier from the physical-tag over an air interface;
8 at least one logical-tag reading device, which is operable to cause a software
9 agent to read the logical attribute information from the logical-tag; and
10 a processing element, which is operable to associate the physical-tag
11 identifier with the logical attribute information.
- 1 2. The system of claim 1, further comprising:
2 an asset manager, which is operable to store a plurality of tracking records,
3 wherein a tracking record for a selected electronic device includes the physical-tag
4 identifier and at least a portion of the logical attribute information.
- 1 3. The system of claim 2, wherein the tracking record includes information
2 selected from a group of information types that includes a logical-tag identifier, the
3 physical-tag identifier, a device type, a device owner identifier, a hardware
4 configuration description, a software configuration description, an Internet protocol
5 address, a user identifier, and device location information.

- 1 4. An apparatus comprising:
2 a logical-tag, which includes
3 an information storage medium, which is operable to store logical
4 attribute information that includes a configuration description for an
5 electronic device, and
6 a software agent, which is operable to retrieve the logical attribute
7 information from the information storage medium in response to an
8 information request from a requester, and to send the logical attribute
9 information to the requester.
- 1 5. The apparatus of claim 4, further comprising:
2 a physical-tag, which includes a physical-tag identifier that can be used to
3 access the logical attribute information.
- 1 6. The apparatus of claim 5, wherein the physical-tag includes a radio-
2 frequency identification tag, which is operable to store the physical-tag identifier
3 using a storage medium that is readable by a physical-tag reading device using a
4 radio-frequency signal.
- 1 7. The apparatus of claim 5, wherein the physical-tag includes an identification
2 tag, which visually indicates the physical-tag identifier using a medium that is
3 readable using a physical-tag reading device that includes an optical scanner.
- 1 8. The apparatus of claim 4, wherein the information storage medium is
2 operable to store logical attribute information selected from a group of information
3 types that includes a logical-tag identifier, the physical-tag identifier, a device type,
4 a device owner identifier, a hardware configuration description, a software
5 configuration description, an Internet protocol address, a user identifier, and device
6 location information..

1 9. An apparatus comprising:
2 a processor, which is operable to create an information request to request
3 logical attribute information that is stored by a logical-tag of a remote electronic
4 device, wherein the logical attribute information includes a configuration
5 description for the remote electronic device; and
6 an interface, operably coupled to the processor, which is operable to send the
7 information request to the remote electronic device and to receive the logical
8 attribute information from the remote electronic device.

1 10. The apparatus of claim 9, wherein the processor is further operable to
2 associate the logical attribute information with a physical-tag identifier, wherein the
3 physical-tag identifier includes a physical-tag identifier associated with the remote
4 electronic device.

1 11. The apparatus of claim 9, further comprising:
2 an asset manager, which is operable to store a tracking record for the remote
3 electronic device, which includes the physical-tag identifier and at least a portion of
4 the logical attribute information.

1 12. The apparatus of claim 9, further comprising:
2 a display device, which is operable to display at least a portion of the logical
3 attribute information, wherein the logical attribute information includes information
4 selected from a group of information types that includes a logical-tag identifier, the
5 physical-tag identifier, a device type, a device owner identifier, a hardware
6 configuration description, a software configuration description, an internet protocol
7 address, a user identifier, and device location information.

1 13. An apparatus comprising:
2 an information storage medium, which is operable to store logical attribute
3 information that includes a configuration description for an electronic device with
4 which the apparatus is associated; and

5 a software agent, which is operable to retrieve the logical attribute
6 information from the information storage medium in response to an information
7 request from a requester, and to send the logical attribute information to the
8 requester.

1 14. The apparatus of claim 13, further comprising:

2 a processor, which is operable to execute the software agent and to access
3 the logical attribute information within the information storage medium.

1 15. The apparatus of claim 13, further comprising:

2 a processor, which is operable to determine the logical attribute information
3 and store the logical attribute information within the information storage medium.

1 16. An apparatus comprising:

2 a physical-tag reading device, which is operable to read, over an air
3 interface, a physical-tag identifier indicated by a physical-tag associated with an
4 electronic device; and

5 a processor, operably coupled to the physical-tag reading device, which is
6 operable to associate the physical-tag identifier with logical attribute information
7 that includes a configuration description for the electronic device.

1 17. The apparatus of claim 16, further comprising:

2 a display device, which is operable to display at least a portion of the logical
3 attribute information, wherein the logical attribute information includes information
4 selected from a group of information types that includes a logical-tag identifier, the
5 physical-tag identifier, a device type, a device owner identifier, a hardware
6 configuration description, a software configuration description, an internet protocol
7 address, a user identifier, and device location information.

1 18. The apparatus of claim 16, further comprising:

2 a logical information retrieval device, which is operable to obtain the logical
3 attribute information.

1 19. The apparatus of claim 18, wherein the logical information retrieval device
2 includes a logical-tag reading device that is operable to obtain the logical attribute
3 information from the electronic device over a wireless link.

1 20. The apparatus of claim 18, wherein the logical information retrieval device
2 includes a logical-tag reading device that is operable to obtain the logical attribute
3 information from the electronic device over a network connection.

1 21. The apparatus of claim 18, wherein the logical information retrieval device
2 includes an interface that is operable to obtain the logical attribute information from
3 a database.

1 22. The apparatus of claim 16, wherein the physical-tag reading device is further
2 operable to obtain the logical attribute information from the physical-tag.

1 23. The apparatus of claim 16, wherein the physical-tag reading device is further
2 operable to write the logical attribute information to the physical-tag.

1 24. An apparatus comprising:
2 a physical-tag reading device, which is operable to read, over an air
3 interface, a physical-tag identifier indicated by a physical-tag associated with an
4 electronic device; and
5 a communication interface that is operable to provide the physical-tag
6 identifier to a remote processing element, which associates the physical-tag
7 identifier with logical attribute information that includes a configuration description
8 for the electronic device.

1 25. The apparatus of claim 24, wherein the communication interface is further
2 operable to provide information that enables the remote processing element to
3 identify a location of the device.

1 26. The apparatus of claim 24, wherein the apparatus further comprises a storage
2 medium operable to store the physical-tag identifier.

1 27. The apparatus of claim 24, wherein the communication interface is a
2 wireless interface.

1 28. The apparatus of claim 24, wherein the communication interface is a
2 network interface.

1 29. An apparatus comprising:
2 a processor, operable to receive logical attribute information that includes a
3 configuration description for a remote electronic device, and to receive a physical-
4 tag identifier indicated by a physical-tag associated with the remote electronic
5 device, and to store, within a database, the logical attribute information and the
6 physical-tag identifier in association with each other; and
7 the database, operably connected to the processor, and which is capable of
8 storing a plurality of tracking records, wherein a first tracking record includes the
9 logical attribute information and the physical-tag identifier for the remote electronic
10 device, and wherein other tracking records include logical attribute information and
11 physical-tag identifiers for other remote electronic devices.

1 30. The apparatus of claim 29, further comprising:
2 an interface, operably coupled to the processor, which receives the physical-
3 tag identifier from a physical-tag reading device.

1 31. The apparatus of claim 29, further comprising:
2 an interface, operably coupled to the processor, which receives the logical
3 attribute information from the remote electronic device.

1 32. A method comprising:
2 creating a tracking record for a remote electronic device, wherein the
3 tracking record includes a physical-tag identifier and tracking information, wherein
4 the physical-tag identifier includes a value indicated by a physical-tag associated
5 with the device, and wherein the tracking information includes logical attribute
6 information stored by a logical-tag associated with the device; and
7 updating the tracking record when updated tracking information is received.

1 33. The method of claim 32, further comprising:
2 updating device location information within the tracking record, wherein the
3 device location information is determined from information received from one or
4 more physical-tag reading devices.

1 34. The method of claim 32, further comprising:
2 sending a request to the remote electronic device for current logical attribute
3 information;
4 receiving a response from the remote electronic device with the current
5 logical attribute information; and
6 updating the tracking record with the current logical attribute information.

1 35. The method of claim 32, further comprising:
2 receiving, from a physical-tag reading device, a request for at least a portion
3 of the tracking information; and
4 returning the at least a portion of the tracking information to the physical-tag
5 reading device.

1 36. The method of claim 35, further comprising:
2 verifying that the tag reading device has permission to access the at least a
3 portion of the tracking information before sending the at least a portion of the
4 tracking information.

1 37. A method comprising:
2 associating a physical-tag with an electronic device, wherein the physical-tag
3 includes a physical-tag identifier that is readable over an air interface;
4 associating a logical-tag with the electronic device, wherein the logical-tag
5 includes logical attribute information that includes a configuration description for
6 the electronic device;
7 updating the logical attribute information by the logical-tag;
8 receiving a request for at least part of the logical attribute information from a
9 remote requester having information regarding the physical-tag; and
10 sending the logical attribute information to the remote requester in response
11 to the request.

1 38. The method of claim 37, wherein updating the logical attribute information
2 comprises:
3 identifying system hardware and software configurations;
4 updating corresponding fields within the logical attribute information; and
5 updating a timestamp, which indicates when the corresponding fields were
6 updated.

1 39. The method of claim 37, wherein updating the logical attribute information
2 comprises:
3 receiving new logical attribute information from a remote source;
4 updating corresponding fields within the logical attribute information; and
5 updating a timestamp, which indicates when the corresponding fields were
6 updated.

1 40. A method comprising:
2 a physical-tag reading device reading, over an air interface, a physical-tag
3 identifier indicated by a physical-tag associated with an electronic device; and

4 retrieving logical attribute information that includes a configuration
5 description for the electronic device based on the physical-tag identifier.

1 41. The method of claim 40, wherein reading the physical-tag identifier
2 comprises reading the physical-tag identifier using a radio-frequency signal.

1 42. The method of claim 40, wherein reading the physical-tag identifier
2 comprises reading the physical-tag identifier using an optical scanner.

1 43. The method of claim 40, wherein retrieving the logical attribute information
2 comprises requesting the logical attribute information from a remote database, using
3 the physical-tag identifier.

1 44. The method of claim 40, wherein retrieving the logical attribute information
2 comprises requesting the logical attribute information from a logical-tag associated
3 with the electronic device.

1 45. The method of claim 40, wherein retrieving the logical attribute information
2 comprises retrieving the logical attribute information from a storage medium, using
3 the physical-tag identifier.

1 46. The method of claim 40, wherein retrieving the logical attribute information
2 comprises retrieving the logical attribute information from the physical-tag.

1 47. The method of claim 40, further comprising the physical-tag reading device
2 writing at least a portion of the logical attribute information to the physical-tag.

1 48. The method of claim 40, further comprising:
2 displaying at least a portion of the logical attribute information, wherein the
3 logical attribute information includes information selected from a group of
4 information types that includes a logical-tag identifier, the physical-tag identifier, a
5 device type, a device owner identifier, a hardware configuration description, a

6 software configuration description, an Internet protocol address, a user identifier,
7 and device location information.

1 49. A method comprising:
2 a physical-tag reading device reading, over an air interface, a physical-tag
3 identifier indicated by a physical-tag associated with an electronic device; and
4 providing the physical-tag identifier to a remote processing element, which
5 associates the physical-tag identifier with logical attribute information that includes
6 a configuration description for the electronic device.

1 50. The method of claim 49, further comprising:
2 providing information that enables the remote processing element to
3 determine a location of the physical-tag reading device.

1 51. The method of claim 49, further comprising:
2 storing the physical-tag identifier; and
3 sending the physical-tag identifier to the remote processing element.

1 52. A method comprising:
2 creating an information request to request logical attribute information that is
3 stored by a logical-tag of a remote electronic device, wherein the logical attribute
4 information includes a configuration description for the remote electronic device;
5 sending the information request to the remote electronic device; and
6 receiving the logical attribute information from the remote electronic device.

1 53. The method of claim 52, further comprising:
2 associating the logical attribute information with a physical-tag identifier,
3 wherein the physical-tag identifier includes a physical-tag identifier associated with
4 the remote electronic device.

1 54. The method of claim 53, further comprising:
2 storing a tracking record for the remote electronic device, which includes the
3 physical-tag identifier and at least a portion of the logical attribute information.

1 55. The method of claim 52, further comprising:
2 displaying at least a portion of the logical attribute information, wherein the
3 logical attribute information includes information selected from a group of
4 information types that includes a logical-tag identifier, the physical-tag identifier, a
5 device type, a device owner identifier, a hardware configuration description, a
6 software configuration description, an Internet protocol address, a user identifier,
7 and device location information.

1 56. A method comprising:
2 a logical-tag of an electronic device storing logical attribute information that
3 includes a configuration description for the electronic device;
4 retrieving the logical attribute information in response to an information
5 request from a requester; and
6 sending the logical attribute information to the requester.

1 57. The method of claim 56, further comprising:
2 determining the logical attribute information in response to a trigger event.

1 58. A computer-readable medium having program instructions stored thereon to
2 perform a method, which when executed, results in:
3 creating a tracking record for a remote electronic device, wherein the
4 tracking record includes a physical-tag identifier and tracking information, wherein
5 the physical-tag identifier includes a value indicated by a physical-tag associated
6 with the device, and wherein the tracking information includes logical attribute
7 information stored by a logical-tag associated with the device; and
8 updating the tracking record when updated tracking information is received.

1 59. The computer-readable medium of claim 58, wherein executing the method
2 further results in:
3 updating device location information within the tracking record, wherein the
4 device location information is determined from information received from one or
5 more physical-tag reading devices.

1 60. The computer-readable medium of claim 58, wherein executing the method
2 further results in:
3 sending a request to the remote electronic device for current logical attribute
4 information;
5 receiving a response from the remote electronic device with the current
6 logical attribute information; and
7 updating the tracking record with the current logical attribute information.